CZ-53X
USER MANUAL

Contents

1 Instruction....1
1.1 Safety Instructions....1
1.2 Warnings....1
2 Feature....2
2.1 Product Features....2
2.2 Specifications....3
3 Functions....4
4 Installation Instruction....5
5 Operation....7
5.1 Power On Self -Check....8
5.3 Camera Lens control....8
5.3.1 Zoom....8
5.3.2 Focus....8
5.3.3 Iris....9
5.4 Setting the preset....9
6 How to Use OSD Menu....9
6.2 Main Menu....9
6.2.1 System Information....11
6.2.2 Address Setting....11
6.2.3 Motion....12
6.2.4 Patterns....13
6.2.5 Camera Setup....14
6.2.6 Cruise Setting....24
6.2.7 IR Setting....24
6.2.8 Display Setup....25
6.2.9 Restore Factory Default....25
6.2.10 Reboot System....25
7 Trouble Shooting....26
8 Fast Control Chart....27
Appendix I DIP Switch Setup....28

1 Instruction

These series of products can be widely used in intelligent building, bank security, urban roads, airport terminals and bus stations, and also are able to satisfy various demands from any square and activities occasion.

1.1 Safety Instructions

- Make sure to read the user manual before using the product.
- Always confirm to national and local safety codes during installation.
- Only qualified and experienced person can carry on this installation and maintenance.
- Use reliable tools, otherwise may lead to dangerous incidents.
- Please check the space and toughness of the site before installing. It should be able to bear 4 times the weight of the dome and its accessories.
- Protocol and baud rate auto detected; RS485 non-polarity to control. Note: Should restart the dome after changed the baud rate and 485 connection method.

1.2 Warnings

- Do not install this speed dome in hazardous places where combustible or explosive materials are stored or used.
- Do not place the machine on shaking desk.
- Make sure no uncertain object or fluid substances get inside the unit.
- Do not turn power on before finishing installation.
- Do not disassemble any part of the items.
- Use soft towel to clean the down cover when necessary, do not use caustic detergent.
- To protect CCD, avoid facing the camera directly to the strong light.
- To prevent damage, do not drop the unit or subject to strong shock or vibration.

2 Feature

2.1 Product Features

* OSD menu;
* Auto flip;
* Proportional zoom;
* Day & night function;
* RS485 non-polarity to control;
* 254 presets, support lens preset;
* Protocol and baud rate auto detected;
* Compatible 38*38 CCD with fixed focus lens;
* Pan Speed: 0.5°~40°/ sec, Tilt Speed: 0.5°~20°/ sec;
* 360° pan rotation, 90° auto flip, auto rotation 180 °, no blind monitor;
* Soft address enables to set up the address and number of the camera;
* Unique appearance of the radiator structure, the heat of IR lights gives off by heat sink install outside, makes the life of IR lights and camera module longer;
* Multiple scans: frame scan (speed adjustable); 4 patterns; 3 tours; 360° random scan; 360° continuous scan; parking action; etc.
* Support Sony, Samsung protocol camera module, special protocol could be customized.

2.2 Specifications

Model	IR Mini Variable Speed Dome Camera
Help Selection	Ceiling
Power Supply	DC12V/2A 50Hz/60Hz
Power	≤15W
Pan Speed	0.5°~40°/ sec
Tilt Speed	0.5°~20°/ sec
Pan Range	360°continuous
Tilt Range	0°~90° auto flip
Preset	254
Pan Scan	frame scan; 360° random scan; 360° continuous scan;
Pattern	4
Cruise	3
OSD Menu	Chinese/English
IR Illumination	ON/OFF (option)
IR Distance	≥20m
Baud Rate	2400bps,4800bps,9600bps auto adaptive
Protocol	PELCO-D, PELCO-P
Communication	RS485
Address	255
Work Temperature	-10℃~40℃
Camera Module	Support 10X Samsung, Sony camera module, compatible 38*38 CCD with fixed focus lens.

3 Functions

3.1 Setting Address Code

Setting address code before using the dome camera, it could be setup by the dip-switch or soft address.

3.2 Zoom/ Rotation Auto Match Technology

The camera can adjust automatically pan tilt speed according to the zoom far or near, make sure easier to operate manual motion detection.

3.3 Auto Pan

The operator pulls the lens to the bottom, and still holds the joystick, at this time, the lens level up 90° flip after auto pan rotation 180°, can watch directly the back of scene in order to achieve 180° continuous vertical monitoring.

3.4 Setting or Calling preset

The dome camera supports 254 presets.

3.5 Lens Control

(1) Zoom Control

User could adjust zoom far or near by keyboard or matrix system, in order to get the full picture or the fine view.

(2) Focus Control

The default of dome camera is auto focus, zoom, the camera lens will automatically focus the center of the screen scene, maintaining a clear image; in special cases the user can manually focus, to achieve the desired image effect.

When in manual focus state, to resume the auto-focus, use the joystick can be restored to auto-focus. Besides, you can send a special control command or call any preset to restore auto-focus.

3.6 Iris Control

User can control the keyboard to adjust the iris manually to get the brightness of the picture.

3.7 Auto Cruise

The preset #99 is programmed to be recalled in sequence. This feature is called auto cruise. Call preset #99 to start preset #1 to #20 cruises, call preset #88, start preset #1~#10, call preset #89, start preset #11~#20 cruise.

3.8 Pattern

A pattern is a saved, repeating, series of pan, tilt, zoom and preset functions that can be recalled with a command from a controller or automatically by a programmed function (alarm action or park action or power-up action). Call preset #84, #85, #86, #86, and #87 to call the saved pattern.

3.9 Continuous Scan

Achieve Continuous scan by calling preset #98 or park action.

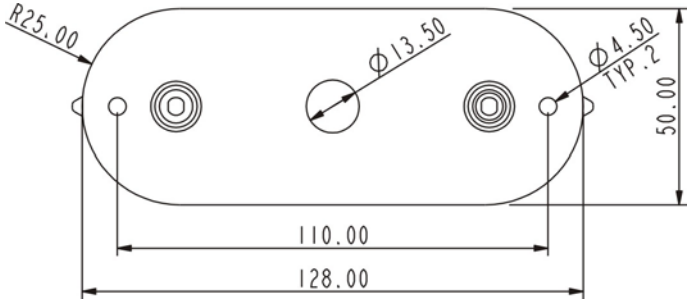
3.10 Random Scan

Achieve random scan by calling preset #92 or park action.

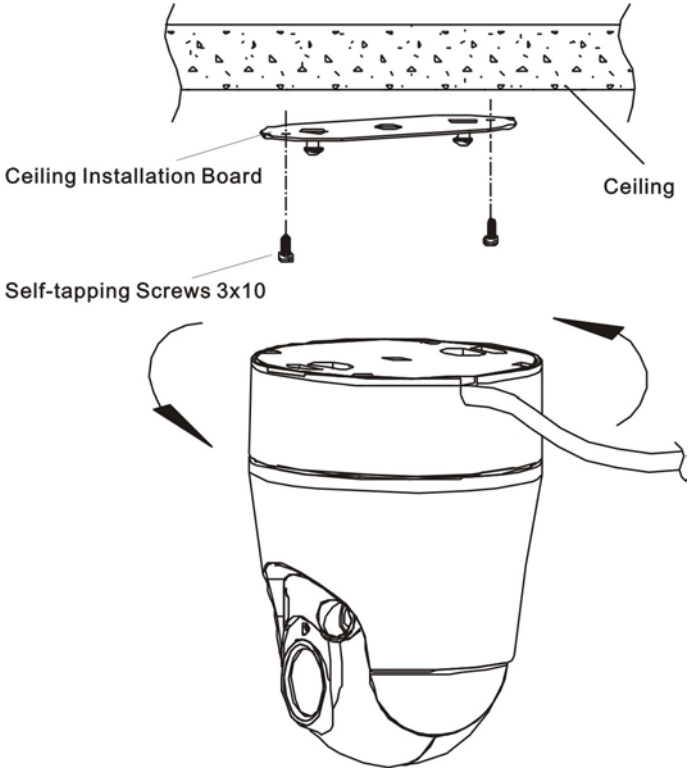
4 Installation Instruction

4.1 Installation

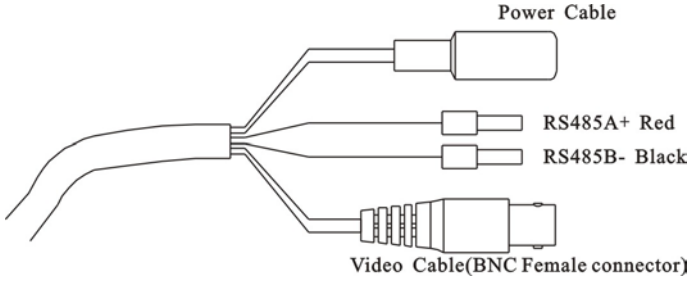
A. Fixed the ceiling installation board with supplied screws. The board dimension as shows:



B. Install the dome camera as shows:



4. 2 System Connection

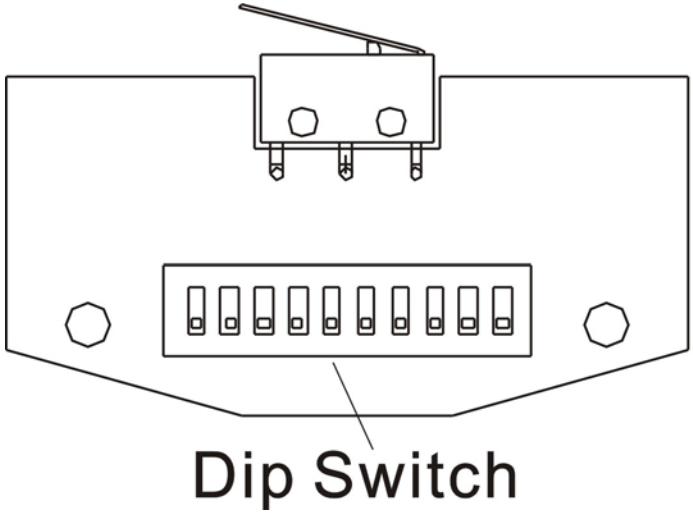


Power supply: DC12V/2A

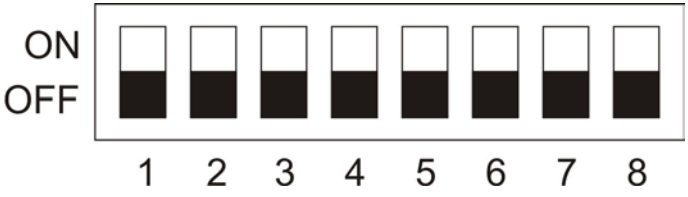
RS485: Output RS485 signal, connect the camera.

BNC Connector: Output Video Signal.

4. 3 Dip Switch Setup



Dip Switch as follows:



Notice: Dip Switch Address Setup see appendix I

5 Operation

Note: The manual will refer to our CCTV tester to explain how to operate and control the camera.

5.1 Power On Self -Check

When power on, the camera moves automatically from pan range to tilt range, after movement, pull the lens to the nearest and then to the farthest, make sure the camera is running in normal.

PROTOCOL:	AUTO
BAUD RATE:	AUTO
ADDRESS:	1

After the display information disappeared, press direction key “Left” and “right” twice, the camera could auto detected the baud rate,protocol and 485 polarity of the control device, then the camera could be controlled in normal.

Remark: After the camera auto detected the baud rate, protocol and 485 polarity of the control device, but when changed the baud rate and 485 polarity of the control device, restart the camera, then the camera could auto detected again and be controlled in normal.

5.2 Control the Direction of Camera

Using “UP, DOWN, LEFT, RIGHT” direction key control PTZ Camera to a desired position.

5.3 Camera Lens control

5.3.1 Zoom

Adjust the lens distance to enlarge or downsize the image for best effect or wide-angle effect.

- Using “ZOOM IN / TELE” key to enlarge the images.
- Using “ZOOM OUT/ WIDE” key to downsize the images.

5.3.2 Focus

Adjust definition of the object of scene

- Press “Focus Far” key to shorten the distance of far scene.
- Press “Focus Near” key to shorten the distance of near scene.

5.3.3 Iris

Press “Iris Open” key to adjust the brightness.

5.4 Setting the preset

Following the steps to set preset:

(1) Select Camera.

(2) Control joystick, Proportion Key and Iris Key to adjust the picture.

(3) Press preset No. + PRESET, save the parameter of the picture.

5.4 Calling the preset

Following the steps to review preset:

Press designated preset + CALL

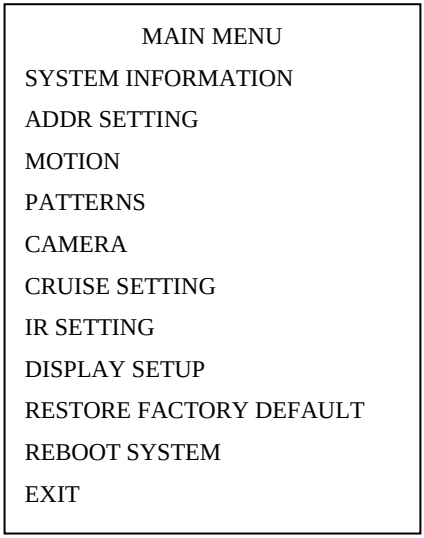
6 How to Use OSD Menu

6.1 Basic operation of Main menu

- Go Preset #95 enter into main menu.
- Using “Iris open” and “Iris close” to confirm or exit main menu.
- Using “UP/DOWN” keys or joystick to move cursor to sub-menu, press “Iris open” to enter into menu.
- Using “UP/DOWN” keys or joystick to move cursor to the function and press “Iris open” to choose the function.
- Using “UP/DOWN” keys or joystick to set up and press “Iris open” to save.
- Move the cursor to “BACK” and press “Iris open” to back to main menu.

6.2 Main Menu

Call preset #95 enter the main menu:



- <SYSTEM INFORMATION>: Shows system information.
- <ADDR SETTING>: Select and setup Soft/Hard address.
- <MOTION>: Setup for motion related settings.
- <PATTERNS>: Setup for Patterns.
- <CAMERA>: Configure Camera related functions and data.
- <CRUISE SETTING>: Setup presets scan.
- <IR SETTING>: Setting IR ON/OFF SENS.
- <DISPLAY SETUP>: Enable / Disable of OSD display on main screen.
- <RESTORE FACTORY DEFAULT>: Restore factory settings.
- <REBOOT SYSTEM>: Reboot the system.

6.2.1 System Information

SYSTEM INFORMATION	
COM	2400, N, 8, 1
ADDRESS	1
SOFTWARE VERSION	V5.2
BACK	
EXIT	

- <COM>: Shows current Baud rate.
- <ADDRESS>: Shows current Camera ID for PTZ control, 0~255.
- <SOFTWARE VERSION>: Shows current software version of camera.

Notice: The system information can not be changed.

6.2.2 Address Setting

ADDR SETTING	
ADDR TYPE	HARD
ADDR SOFT	1
ADDR HARD	1
BACK	
EXIT	

- <ADDR TYPE>: Choose the address type (Hard/Soft Add), when you choose soft type, the user can setup the address by remote access.
- <ADDR SOFT>: Setup soft address. The camera ID can be set from 0~255.
- <ADDR HARD>: Setup hard address. It can be changed by DIP Switch.
- <BACK>: Back to last menu without saving the setting.
- <EXIT>: Saving the setting and exit the menu, then the dome will restart.

Notice: Please reboot the dome camera after reset the camera ID.

6.2.3 Motion

MOTION	
FRAME SCAN	
POWER UP	NONE
PARK TIME	15S
PARK ACTION	NONE
BACK	
EXIT	

Frame Scan

FRAME SCAN	
SET SCAN POSITION	
CLEAR FRAME SCAN	
FRAME SCAN SPEED	16
BACK	
EXIT	

- <SET SCAN POSITION>: Set up scan range between two positions (Left/Right extreme position).
- <CLEAR FRAME SCAN>: Deletes frame scan.

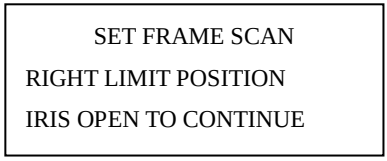
6.2.3.1 Set Scan Position

(1) Move the cursor to <SET SCAN POSITION> and enter below interface.

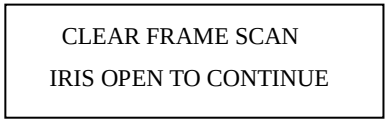
SET FRAME SCAN
LEFT LIMIT POSITION
IRIS OPEN TO CONTINUE

(2) Move the cursor to choose the extreme position of preset by using

“Left/Right” keys or joystick of your controller, then press “Iris Open” to enter below interface:

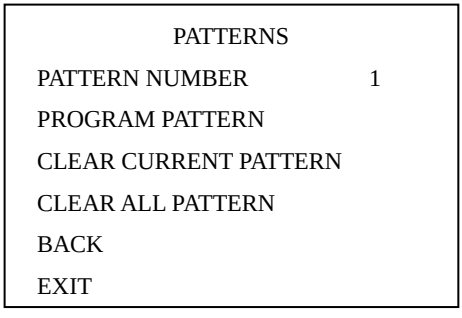


6.2.3.2 Clear Frame Scan



Move the cursor to “Clear Frame Scan” to enter, then press “Iris Open” to delete the extreme positions.

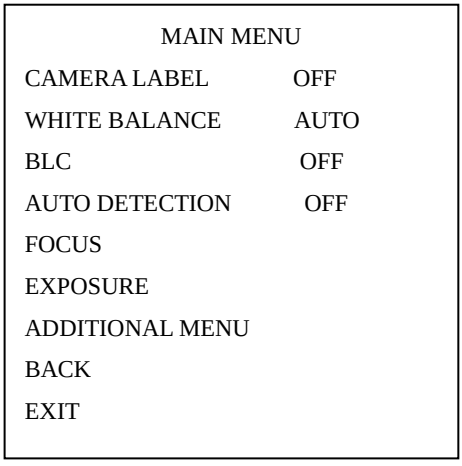
6.2.4 Patterns



- <PATTERN NUMBER>: Set Pattern number (1~4).
- <PROGRAM PATTERN>: Pattern scan program.
- <CLEAR CURRENT PATTERN>: Deletes data in current pattern.

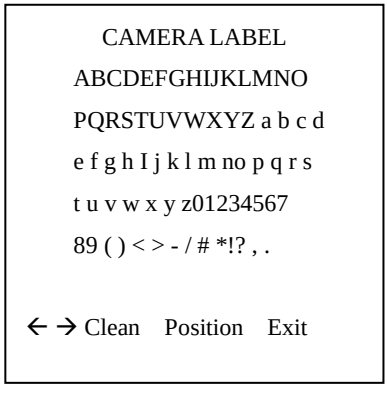
6.2.5 Camera Setup

We are using Samsung SDM-100P camera to explain below operation.



Notice: "Up/Down" keys for option, "Left/Right" keys for details, "Iris Open" for sub-menu.

- <CAMERA LABEL>: press "Iris Open" to enter sub-menu and edit camera label.



Using cursor to select the letter, then press "Iris Open" key to save the setup.

- <WHITE BALANCE>:

WB Mode: Auto Trace / Manual / Auto

(1) Auto Trace : Indoor/Outdoor, The camera can automatically adjust ambient light from1800K~10500K(Indoor: 3000~10,500K; Outdoor: 1,800~10,500K), to ensure the most nature image effect.

AUTO TRACE WB	
AUTO TRACE WB MODE	OUTDOOR
EXIT	

(2) Manual: Close auto WB, adjust Red and Blue level manually.

MANUAL WB	
RED	30…|……
BLUE	41…..…|…….
EXIT	

Red adjust range: 0~100 Blue adjust range: 0~100

(3) Auto BW: This mode is the most accurate and reliable for most places.

- <BACKLIGHT COMPENSATION>

Backlight: High/Middle/Low/Off

- <MOTION DETECTION>

Match the Alarm sensor input to one of preset positions. If an external sensor is activated, camera will move to corresponding preset position when this item is predefined.

MOTION DETECTION	
ALARM	OFF
SELECT REGION	1
REGION MODE	ON
TOP	20…|..…….
BOTTOM	25……|…….
LEFT	20…|…….
RIGHT	40……|….
EXIT	

Alarm: On/Off Region：1~4 Region Mode: On / Off

- <FOCUS>

FOCUS	
MODE	AUTO
ZOOM TRACE MODE	ON
ZOOM TRACE SPEED	FAST
DIGITAL ZOOM	ON
SHOW ZOOM	OFF
INITIAL ZOOM POSITION	OFF
LENS INITIALIZATION	
EXIT	

♦ <MODE>: Auto, Manual, One-off Auto focus. Press “Iris Open” to enter sub-menu

One-off auto focus: Once the image zoom changes, the camera will automatically focus and fix the status till the image change again.

Notice: Do not use Auto Focus under the below conditions.

➢ The target is too dark (such as black clothes or curtains).

- The target is very smooth(like car surface)
- The brightness contrast of the target is not very clear.
- Too strong high light or back light.
- Too high contrast.
- Some shade in front of the target.

① Auto mode setup:

SETUP ZOOM
↑ ZOOM IN ↓ ZOOM OUT
BACK: PRESS “SET” KEY.

Using the direction keys to enlarge or downsize, press “Iris/Open” key to back.

② One-off Auto focus and Manual focus Adjustment:

SETUP ZOOM
↑ ZOOM IN ↓ ZOOM OUT
← NEAR → FAR
BACK: PRESS “SET” KEY.

- <ZOOM TRACE MODE>:

Manual Focus: Off. Auto and One-off Auto Focus: On / Off.

- <ZOOM TRACE SPEED>: Fast/Slow.
- <DIGITAL ZOOM>: On / Off, range: X2~X10.

DIGITAL ZOOM	
DIGITAL ZOOM	X2
EXIT	

- <SHOW ZOOM>: On / Off.
- <INITIAL ZOOM POSITION>: Using direction keys to move the

cursor to “On”, then press “Iris Open” to set up.

INITIAL ZOOM POSITION	
INITIAL ZOOM POSITION	X1
EXIT	

Zoom Range: X1~X10

- <LENS INITIALIZATION>: press “Iris open/Set” key to initialize the lens.
- <EXPOSURE>:

EXPOSURE	
BRIGHTNESS	25…….|…….
IRIS	AUTO
SHUTTER	——
AGC	OFF
SSNR	OFF
SENS-UP	OFF
EXIT	

- <BRIGHTNESS>: Brightness Range: 0~100.
- <IRIS>: Auto/ Manual. Press “Iris Open” to enter into manual setup.

MANUAL IRIS	
IRIS	100…..……|
EXIT	

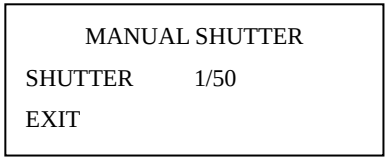
If the number of iris is set to higher, the image will be brighter.

- <SHUTTER > :Shutter Mode: Flicker / Manual / Auto

The shutter speed of Anti-flash is 1/100 (NTSC), 1/120 (PAL)

Manual mode setting (PAL):2X、4X、6X、8X、10X、12X、14X、16X、

24X、32X、64X、128X、1/120000、1/60000、1/30000、1/10000、/1/7000、1/5000、1/2500、1/1600、1/1000、1/700、1/500、1/250、1/100、1/50.

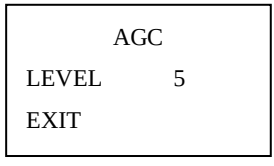


Notice: Auto shutter setting only for manual iris mode.

❖ <AGC>: High / Middle / Off / Manual

Enhances image brightness automatically in case that luminance level of image signal is too low.

Range: 5-41



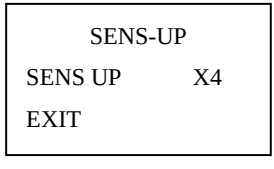
❖ <SSNR>: High / Middle / Low / Off

Enhances images by reducing noises when gain level of images too high.

❖ <SENS-UP>: Auto / Off

Adjust CCD exposure time.

Auto mode setting:2X、4X、6X、8X、10X、12X、14X、16X、24X、32X、64X、128X.



♦ <ADDITIONAL MENU>:

ADDITIONAL MENU	
USER PRESET SETUP	OFF
PRIVACY ZONE MASK	OFF
DAY & NIGHT	AUTO 1
SYNC. SYSTEM	INTERNAL
IMAGE ADJUSTMENT	
RE-BOOT	
EXIT	

①**USER PRESET SETUP:** On / Off

USER PRESET	
USER PRESET NUMBER	NO 1
USER PRESET MODE	OFF
SAVE	
CLEAR	
EXIT	
PRESET NOT SETUP.	

❖ <USER PRESET NUMBER>: 8 groups user preset number, 1~8.

❖ <USER PRESET MODE>: use direction keys to “On” and press “Iris/Open” to setup.

USER PRESET MODE
FOCUS
EXPOSURE
OTHER
EXIT

- <Focus>: Using direction keys to “Focus” and press “Iris/Open” key to set up.

FOCUS	
MODE	AUTO
ZOOM TRACE MODE	ON
ZOOM TRACE SPEED	FAST
DIGITAL ZOOM	ON
SHOW ZOOM	OFF
EXIT	

- <OTHER>: refer to below details.

OTHER	
CAMERA TYPE	OFF
BW	AUTO TRACE BW
BLC	OFF
MOTION DETECTION	OFF
PRIVACY MASK	OFF
DAY & NIGHT	OUTER
HORIZONTAL FLIP	OFF
VERTICAL FLIP	OFF
EXIT	

② **PRIVACY MASK:**

PRIVACY MASK	
GROUP SELECTION	1
AREA SELECTION	1
ZONE MODE	OFF
COLOR	50…|..…….
TOP	50…|..…….
BOTTOM	104……|…….
LEFT	50…|…….
RIGHT	98……|……
EXIT	

- <GROUP SELECTION>: 1~ 8
- <AREA SELECTION>: 1~ 4 zones / group
- <ZONE MODE>: On / Off
- <COLOR>: color, range of privacy zone is 0~100.
- <TOP>: ordinate position on the top of zone.
- <BOTTOM>: ordinate position on the bottom.
- <LEFT>: horizontal abscissa position on the left side.
- <RIGHT>: horizontal abscissa position on the left side.

③ **DAY/NIGHT:** Day and Night function. Auto 1/ Auto 2 / Outer/ Color/ B&W mode.

- <B&W MODE>: suit for night work.
- <COLOR MODE>: suit for daytime.
- <AUTO MODE>: change day and night mode automatically according to the environment illumination. Auto 1 is faster than Auto 2.

④**SYNCHRONOUS MODE:** internal, unchangeable.

⑤IMAGE ADJUSTMENT:

IMAGE ADJUSTMENT	
FREEZE	OFF
HORIZONTAL FLIP	OFF
VERTICAL FLIP	OFF
SHARPNESS	ON
HUE	50……|…….
EXIT	

- <FREEZE>: Camera starts freezing the image of start point, as soon as camera stops at preset end point, camera starts display live images.
- <HORIZONTAL FLIP>: image will flip 180°when you start up. Normal when shutdown.
- <VERTICAL FLIP>: image will flip 180°when you start up, and normal when shutdown.
- <SHARPNESS>: adjust the sharpness of the edges. Range: 0~31.

SHARPNESS	
SHARPNESS	8…|…….
EXIT	

- <HUE>: adjust the image hue, range: 0~100.

⑥ **RE-BOOT:** restart the camera.

⑦ **EXIT:** Choose “Iris Open” to exit the camera menu.

6.2.6 Cruise Setting

CRUISE SETTING	
DWELL TIME (SECS)	8
PRESET 1	ON
PRESET 2	ON
PRESET 3	ON
PRESET 4	ON
PRESET 5	ON
PRESET 6	ON
PRESET 7	ON
PRESET 8	ON
PRESET 9	ON
PRESET10	ON

CRUISE SETTING	
PRESET11	ON
PRESET12	ON
PRESET13	ON
PRESET14	ON
PRESET15	ON
PRESET16	ON
PRESET17	ON
PRESET18	ON
PRESET19	ON
PRESET20	ON
BACK	

- <Dwell Time (Secs)>: preset cruise dwell time, range:5～250 Sec.
- <Preset 1~20>: default is ON, use direction key of CCTV Tester to modify preset and confirm by press “Iris/Open” key.

6.2.7 IR Setting

IR SETTING	
IR MODE	AUTO
IR ON SENS	110
IR OFF SENS	90
BACK	
EXIT	
CURRENT LEVEL	23

- <IR MODE>: IR light’s control mode, AUTO/ON/OFF could be chosen.
- <IR ON SENS>: IR ON automatically when current IR light value higher than setting IR light value. 81~254 could be optional.
- <IR OFF SENS>: IR OFF automatically when current IR light value

lower than setting IR value. 81~254 could be optional.

- <CURRENT LEVEL>: the current IR light value.

Use direction key of CCTV Tester to modify preset and confirm by press “Iris/Open” key.

6.2.8 Display Setup

DISPLAY SETUP	
PRESET LABEL	ON
P/T DEG	ON
BRIGHT DATA	ON
BACK	
EXIT	

- < PRESET LABEL>: Show or hide presetting labels.
- <P/T DEG>: Show or hide camera pan/tilt labels. The coordinates refer to the monitor centre.
- <BRIGHT DATA>: Show or hide IR light value.

Use direction key of CCTV Tester to modify preset and confirm by press “Iris/Open” key.

6.2.9 Restore Factory Default

Move cursor to <RESTORE FACTORY DEFAULT> and press “Iris/Open” to restore factory default.

6.2.10 Reboot System

Move cursor to <REBOOT SYSTEM> and press “Iris/Open” to reboot the system. Easy to change the Soft/Hard address by remote and no need to power off.

7 Trouble Shooting

Troubles	Reason	Solution
No action when power on	1. The power supply DC12V is not connected correctly. 2. The fuse is broken.	1. Correct the connection. 2. Check the power supply is connected, or confirms if the plug connects well. 3. Replace the fuse.
Self-testing and image are normal but the dome is out of control	1. The dome DIP switch setting is incorrect. 2. RS485 cable is disconnected or reversed. 3. Incorrect RS485 cable wiring.	1. Reset the DIP Switch according to the DIP switch chart. 2. Check 485 bus controls. 3. Check the wiring. 4. Check the control device.
Some function is out of control	1. RS485 communication signal is not balance. 2. Control protocol is not compatible. 3.RS485 is disturbed	1.Connect 120Ω balance resistance. 2. Reset protocol. 3.Eliminate the interference sources
Unclear image	1. Focus is in manual state. 2. Extreme zoom magnification. 3. Dome cover is dirty.	1. Reset the focus mode to Auto. 2. Downsize zoom proportion 3. Clean the dome cover.
No night vision	1. Camera is in Color state. 2. Backlight on the top or back of the dome camera	1. Reset the day/night function to Auto. 2.Remove the direct light source.

8 Fast Control Chart

Special Preset	Function
CALL + #95	Access main menu
CALL + #82	Start frame scan function
CALL + #83	Clear all Presets
CALL + #84	Start pattern 1
CALL + #85	Start pattern 2
CALL + #86	Start pattern 3
CALL + #87	Start pattern 4
CALL + #88	Start preset #1~#10 cruise
CALL + #89	Start preset #11~#20 cruise
CALL + #99	Start preset #1~#20 cruise
Main Menu CALL #96+PRESET	Choose different camera module and PAL/NTSC
CALL + #92	Start 360° random scan
CALL + #98	Start 360° Continuous scan

Appendix I DIP Switch Setup

K1 DIP switch is an address switch, consist of 8 number, use 8421 binary code, max 255 address. When the switch is in the “ON” position, the number from 1~8 corresponding to 1, 2, 4, 8, 16, 32, 64, 128. For example, if you set 1, 3, 5, 7 switch to the “ON” position, the corresponding address will be 1+4+16+64=85. please refer to below details.

DIP switch / Address	K1 ID Switch (number 1- number 8) 1 2 3 4 5 6 7 8		DIP switch / Address	K1 ID Switch (number 1- number 8) 1 2 3 4 5 6 7 8
1	1 0 0 0 0 0 0 0		2	0 1 0 0 0 0 0 0
3	1 1 0 0 0 0 0 0		4	0 0 1 0 0 0 0 0
5	1 0 1 0 0 0 0 0		6	0 1 1 0 0 0 0 0
7	1 1 1 0 0 0 0 0		8	0 0 0 1 0 0 0 0
9	1 0 0 1 0 0 0 0		10	0 1 0 1 0 0 0 0
11	1 1 0 1 0 0 0 0		12	0 0 1 1 0 0 0 0
13	1 0 1 1 0 0 0 0		14	0 1 1 1 0 0 0 0
15	1 1 1 1 0 0 0 0		16	0 0 0 0 1 0 0 0
17	1 0 0 0 1 0 0 0		18	0 1 0 0 1 0 0 0
19	1 1 0 0 1 0 0 0		20	0 0 1 0 1 0 0 0
21	1 0 1 0 1 0 0 0		22	0 1 1 0 1 0 0 0
23	1 1 1 0 1 0 0 0		24	0 0 0 1 1 0 0 0
25	1 0 0 1 1 0 0 0		26	0 1 0 1 1 0 0 0
27	1 1 0 1 1 0 0 0		28	0 0 1 1 1 0 0 0
29	1 0 1 1 1 0 0 0		30	0 1 1 1 1 0 0 0
31	1 1 1 1 1 0 0 0		32	0 0 0 0 0 1 0 0
33	1 0 0 0 0 1 0 0		34	0 1 0 0 0 1 0 0
35	1 1 0 0 0 1 0 0		36	0 0 1 0 0 1 0 0

37	1 0 1 0 0 1 0 0		38	0 1 1 0 0 1 0 0
39	1 1 1 0 0 1 0 0		40	0 0 0 1 0 1 0 0
41	1 0 0 1 0 1 0 0		42	0 1 0 1 0 1 0 0
43	1 1 0 1 0 1 0 0		44	0 0 1 1 0 1 0 0
45	1 0 1 1 0 1 0 0		46	0 1 1 1 0 1 0 0
47	1 1 1 1 0 1 0 0		48	0 0 0 0 1 1 0 0
49	1 0 0 0 1 1 0 0		50	0 1 0 0 1 1 0 0
51	1 1 0 0 1 1 0 0		52	0 0 1 0 1 1 0 0
53	1 0 1 0 1 1 0 0		54	0 1 1 0 1 1 0 0
55	1 1 1 0 1 1 0 0		56	0 0 0 1 1 1 0 0
57	1 0 0 1 1 1 0 0		58	0 1 0 1 1 1 0 0
59	1 1 0 1 1 1 0 0		60	0 0 1 1 1 1 0 0
61	1 0 1 1 1 1 0 0		62	0 1 1 1 1 1 0 0
63	1 1 1 1 1 1 0 0		64	0 0 0 0 0 0 1 0
65	1 0 0 0 0 0 1 0		66	0 1 0 0 0 0 1 0
67	1 1 0 0 0 0 1 0		68	0 0 1 0 0 0 1 0
69	1 0 1 0 0 0 1 0		70	0 1 1 0 0 0 1 0
71	1 1 1 0 0 0 1 0		72	0 0 0 1 0 0 1 0
73	1 0 0 1 0 0 1 0		74	0 1 0 1 0 0 1 0
75	1 1 0 1 0 0 1 0		76	0 0 1 1 0 0 1 0
77	1 0 1 1 0 0 1 0		78	0 1 1 1 0 0 1 0
79	1 1 1 1 0 0 1 0		95	1 1 1 1 1 0 1 0
81	1 0 0 0 1 0 1 0		82	0 1 0 0 1 0 1 0
83	1 1 0 0 1 0 1 0		84	0 0 1 0 1 0 1 0
85	1 0 1 0 1 0 1 0		86	0 1 1 0 1 0 1 0
87	1 1 1 0 1 0 1 0		88	0 0 0 1 1 0 1 0
89	1 0 0 1 1 0 1 0		90	0 1 0 1 1 0 1 0

91	0 0 1 1 1 0 1 0	92	0 0 1 1 1 0 1 0
93	1 0 1 1 1 0 1 0	94	0 1 1 1 1 0 1 0
95	1 1 1 1 1 0 1 0	96	0 0 0 0 0 1 1 0
97	1 0 0 0 0 1 1 0	98	0 1 0 0 0 1 1 0
99	1 1 0 0 0 1 1 0	100	0 0 1 0 0 1 1 0
101	1 0 1 0 0 1 1 0	102	0 1 1 0 0 1 1 0
103	1 1 1 0 0 1 1 0	104	0 0 0 1 0 1 1 0
105	1 0 0 1 0 1 1 0	106	0 1 0 1 0 1 1 0
107	1 1 0 1 0 1 1 0	108	0 0 1 1 0 1 1 0
109	1 0 1 1 0 1 1 0	110	0 1 1 1 0 1 1 0
111	1 1 1 1 0 1 1 0	112	0 0 0 0 1 1 1 0
113	1 0 0 0 1 1 1 0	114	0 1 0 0 1 1 1 0
115	1 1 0 0 1 1 1 0	116	0 0 1 0 1 1 1 0
117	1 0 1 0 1 1 1 0	118	0 1 1 0 1 1 1 0
119	1 1 1 0 1 1 1 0	120	0 0 0 1 1 1 1 0
121	1 0 0 1 1 1 1 0	122	0 1 0 1 1 1 1 0
123	1 1 0 1 1 1 1 0	124	0 0 1 1 1 1 1 0
125	1 0 1 1 1 1 1 0	126	0 1 1 1 1 1 1 0
127	1 1 1 1 1 1 1 0	128	0 0 0 0 0 0 0 1
129	1 0 0 0 0 0 0 1	130	0 1 0 0 0 0 0 1
131	1 1 0 0 0 0 0 1	132	0 0 1 0 0 0 0 1
133	1 0 1 0 0 0 0 1	134	0 1 1 0 0 0 0 1
135	1 1 1 0 0 0 0 1	136	0 0 0 1 0 0 0 1
137	1 0 0 1 0 0 0 1	138	0 1 0 1 0 0 0 1
139	1 1 0 1 0 0 0 1	140	0 0 1 1 0 0 0 1
141	1 0 1 1 0 0 0 1	142	0 1 1 1 0 0 0 1
143	1 1 1 1 0 0 0 1	144	0 0 0 0 1 0 0 1

145	1 0 0 0 1 0 0 1	146	0 1 0 0 1 0 0 1
147	1 1 0 0 1 0 0 1	148	0 0 1 0 1 0 0 1
149	1 0 1 0 1 0 0 1	150	0 1 1 0 1 0 0 1
151	1 1 1 0 1 0 0 1	152	0 0 0 1 1 0 0 1
153	1 0 0 1 1 0 0 1	154	0 1 0 1 1 0 0 1
155	1 1 0 1 1 0 0 1	156	0 0 1 1 1 0 0 1
157	1 0 1 1 1 0 0 1	158	0 1 1 1 1 0 0 1
159	1 1 1 1 1 0 0 1	160	0 0 0 0 0 1 0 1
161	1 0 0 0 0 1 0 1	162	0 1 0 0 0 1 0 1
163	1 1 0 0 0 1 0 1	164	0 0 1 0 0 1 0 1
165	1 0 1 0 0 1 0 1	166	0 1 1 0 0 1 0 1
167	1 1 1 0 0 1 0 1	168	0 0 0 1 0 1 0 1
169	1 0 0 1 0 1 0 1	170	0 1 0 1 0 1 0 1
171	1 1 0 1 0 1 0 1	172	0 0 1 1 0 1 0 1
173	1 0 1 1 0 1 0 1	174	0 1 1 1 0 1 0 1
175	1 1 1 1 0 1 0 1	176	0 0 0 0 1 1 0 1
177	1 0 0 0 1 1 0 1	178	0 1 0 0 1 1 0 1
179	1 1 0 0 1 1 0 1	180	0 0 1 0 1 1 0 1
181	1 0 1 0 1 1 0 1	182	0 1 1 0 1 1 0 1
183	1 1 1 0 1 1 0 1	184	0 0 0 1 1 1 0 1
185	1 0 0 1 1 1 0 1	186	0 1 0 1 1 1 0 1
187	1 1 0 1 1 1 0 1	188	0 0 1 1 1 1 0 1
189	1 0 1 1 1 1 0 1	190	0 1 1 1 1 1 0 1
191	1 1 1 1 1 1 0 1	192	0 0 0 0 0 0 1 1
193	1 0 0 0 0 0 1 1	194	0 1 0 0 0 0 1 1
195	1 1 0 0 0 0 1 1	196	0 0 1 0 0 0 1 1
197	1 0 1 0 0 0 1 1	198	0 1 1 0 0 0 1 1

199	1 1 1 0 0 0 1 1	200	0 0 0 1 0 0 1 1
201	1 0 0 1 0 0 1 1	202	0 1 0 1 0 0 1 1
203	1 1 0 1 0 0 1 1	204	0 0 1 1 0 0 1 1
205	1 0 1 1 0 0 1 1	206	0 1 1 1 0 0 1 1
207	1 1 1 1 0 0 1 1	208	0 0 0 0 1 0 1 1
209	1 0 0 0 1 0 1 1	210	0 1 0 0 1 0 1 1
211	1 1 0 0 1 0 1 1	212	0 0 1 0 1 0 1 1
213	1 0 1 0 1 0 1 1	214	0 1 1 0 1 0 1 1
215	1 1 1 0 1 0 1 1	216	0 0 0 1 1 0 1 1
217	1 0 0 1 1 0 1 1	218	0 1 0 1 1 0 1 1
219	1 1 0 1 1 0 1 1	220	0 0 1 1 1 0 1 1
221	1 0 1 1 1 0 1 1	222	0 1 1 1 1 0 1 1
223	1 1 1 1 1 0 1 1	224	0 0 0 0 0 1 1 1
225	1 0 0 0 0 1 1 1	226	0 1 0 0 0 1 1 1
227	1 1 0 0 0 1 1 1	228	0 0 1 0 0 1 1 1
229	1 0 1 0 0 1 1 1	230	0 1 1 0 0 1 1 1
231	1 1 1 0 0 1 1 1	232	0 0 0 1 0 1 1 1
233	1 0 0 1 0 1 1 1	234	0 1 0 1 0 1 1 1
235	1 1 0 1 0 1 1 1	236	0 0 1 1 0 1 1 1
237	1 0 1 1 0 1 1 1	238	0 1 1 1 0 1 1 1
239	1 1 1 1 0 1 1 1	240	0 0 0 0 1 1 1 1
241	1 0 0 0 1 1 1 1	242	0 1 0 0 1 1 1 1
243	1 1 0 0 1 1 1 1	244	0 0 1 0 1 1 1 1
245	1 0 1 0 1 1 1 1	246	1 0 1 0 1 1 1 1
247	1 1 1 0 1 1 1 1	248	0 0 0 1 1 1 1 1
249	1 0 0 1 1 1 1 1	250	0 1 0 1 1 1 1 1
251	1 1 0 1 1 1 1 1	252	0 0 1 1 1 1 1 1

253	1 0 1 1 1 1 1 1		254	0 1 1 1 1 1 1 1
255	1 1 1 1 1 1 1 1			

Notice: some protocols and address start from 0, if you can not control the dome camera, try to do ±1 of address code.